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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,783	03/26/2004	John P. O'Brien	6938-0001-1	9654

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EXAMINER	
BERGIN, JAMES S	

ART UNIT	PAPER NUMBER
3641	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/810,783	O'BRIEN ET AL.	
	Examiner	Art Unit	
	James S. Bergin	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 March 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawing informalities noted in the papers mailed on 3/29/2005 and 9/22/2005, must now be corrected. On page 4 of the response filed 12/27/2005, the applicant has noted that, *"formal drawings will be submitted, hopefully before the examiner reaches this Request for Continued Examination"*. On page 3 of the response filed 5/4/2006, the applicant requests that this requirement be held in abeyance until a claim is found allowable. This requirement for corrected drawings will not be held in abeyance until a claim is found allowable, and the applicant must now submit corrected drawings in response to this action (**see 37 CFR 1.85 *and 37 CFR 1.121 (d)***).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, lines 8 and 9, "*one of said free end of the detonating cord stored on said reel*" is indefinite because, as understood from the applicants' specification, the cord has a "*free end*" at one end of the cord, with the other end of the cord being attached to the reel at the core of the reel. It is not understood how the cord wound on the reel can have more than one free end. The limitation, "one of said free end", on line 8, gives the impression that the cord has more than one available free end?

In line 7, "*withdrawing successive segments*" is indefinite because no segment has been claimed as separated from the cord. How are the segments delineated if not by severing?

In line 10, the meaning of "*the detonating length*" is unclear and lacks a proper antecedent basis. Does it refer to the full length of detonating cord remaining on the reel after a segment has been removed, or does it refer to a subset of the remaining length of cord on the reel?

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowalski (US 4,010,914) in view of Nusbaum (US 6,607,110 B2) or Gottscho (US 2,825,279).

The following rejections are made in the view of the indefiniteness of claim 3 as outlined above.

Kowalski discloses providing a dispensing assembly and method of dispensing comprising a plurality of reels (not illustrated) of detonating cord, the reels mounted on the spindle 21 (figure 1; col. 1, lines 30-35, lines 46-51; col. 2, lines 43-44, lines 59-62). Detonating cord is withdrawn from the reels for use, as needed, such disclosure of

Kowalski inherently including withdrawal of segment(s) of desired length of detonating cord. Kowalski's dispensing assembly is easily moved from one position to another (col. 3, lines 29-33).

Kowalski does not specifically disclose providing numerical markings on the coiled detonating cord on each reel for providing a visual indication of the remaining length of cord on each reel.

Nusbaum discloses a method of providing numerical markings on a material dispensed from a roll, the numerical markings comprising numerical indicia to indicate the amount of material dispensed and/ or the amount of material remaining on the roll after the dispensing step (see abstract; figure 1; col. 2, lines 55-59; col. 3, line 50 – col. 4, line 37). Nusbaum teaches that the use of the numerical indicia eliminates the need to use more costly and complicated mechanisms for the same purpose (col. 4, lines 29-31). Nusbaum's numerical indicia decrease from the free end of the dispensed material to the core of the roll.

Although Nusbaum's invention does not involve detonating cord, Nusbaum defines analogous art to Kowalski because Nusbaum teaches a dispensing solution for a material rolled upon a dispensing member.

Gottscho discloses (col. 1, lines 1-60) a method of providing numerical markings on a material dispensed from a roll, the numerical markings comprising numerical indicia to indicate the amount of material remaining on the roll after the dispensing step and to provide a permanent inventory of the material remaining on the roll (col. 1, lines 57-61). Gottscho's numerical indicia decrease from the free end of the dispensed

material to the core of the roll (col. 1, lines 44-48). Although Gottscho's invention does not involve detonating cord, Gottscho defines analogous art to Kowalski because Gottscho teaches a dispensing solution for a material rolled upon a dispensing member.

In view of the teachings of Nusbaum, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to provide numerical indicia on the detonating cord of each of the reels of Kowalski's dispensing apparatus, the numerals decreasing from the free end of the cord to the core of the each reel, such a modification to Kowalski allowing a user to visually determine how much cord has been dispensed from each reel and how much cord remained on each reel after dispensing cord therefrom.

Alternatively, in view of the teachings of Gottscho, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to provide numerical indicia on the detonating cord of each of the reels of Kowalski's dispensing apparatus, the numerals decreasing from the free end of the cord to the core of the each reel, such a modification to Kowalski allowing a user to visually determine how much cord remained on each reel and to provide a permanent inventory of the material remaining on each reel.

Response to Arguments

6. Applicants' arguments filed 5/4/2006 have been fully considered but they are not persuasive. In response to applicant's argument that Nusbaum or Gottscho are nonanalogous art to Kowalski, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the

particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Nusbaum or Gottscho are reasonably pertinent to Kowalski because they both teach a dispensing solution for a material rolled upon a dispensing member.

7. In response to applicants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine the references is found in either Nusbaum or Gottscho as indicated in the rejection outlined above.

8. In response to applicants' argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

9. In response to applicants' argument that the dispensing apparatus of Nusbaum or Gottscho would not be capable of dispensing detonating cord, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The examiner relies on either Nusbaum or Gottscho only for teaching the provision of numerical markings on a material dispensed from a roll, the numerical markings comprising numerical indicia to indicate the amount of material dispensed and/ or the amount of material remaining on the roll after the dispensing step, the numerical indicia decreasing from the free end of the dispensed material to the core of the roll.

10. On page 3, (last two lines) of the applicants' arguments, the words, "*after severing one of more segments*" appears. However, as currently written, neither of applicants' claim 3 or 4 recites severing a segment of the detonating cord from that remaining attached to the reel.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Bergin whose telephone number is 571-272-6872. The examiner can normally be reached on Monday - Wednesday and Friday, 8.30 - 5.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Bergin

MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER